

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111123 A1

(51) International Patent Classification⁷: **C08L 23/04**,
23/08, C08J 5/18, B32B 27/32

(21) International Application Number:
PCT/US2004/017447

(22) International Filing Date: 2 June 2004 (02.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/477,244 10 June 2003 (10.06.2003) US

(71) Applicant (for all designated States except US): **DOW
GLOBAL TECHNOLOGIES INC.** [US/US]; Washing-
ton Street, 1790 Building, Midland, MI 48674 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WOOSTER, Jef-
frey, J.** [US/US]; 201 Almond Drive, Lake Jackson, TX

77566 (US). **OSWALD, Thomas, T.** [US/US]; 323 Huck-
leberry, Lake Jackson, TX 77566 (US). **DEKUNDER,
Staci, A.** [US/US]; 2927 Castlerock Court, Pearland, TX
77584 (US). **NIETO, Jesus** [ES/US]; 209 Larkspur, Lake
Jackson, TX (US).

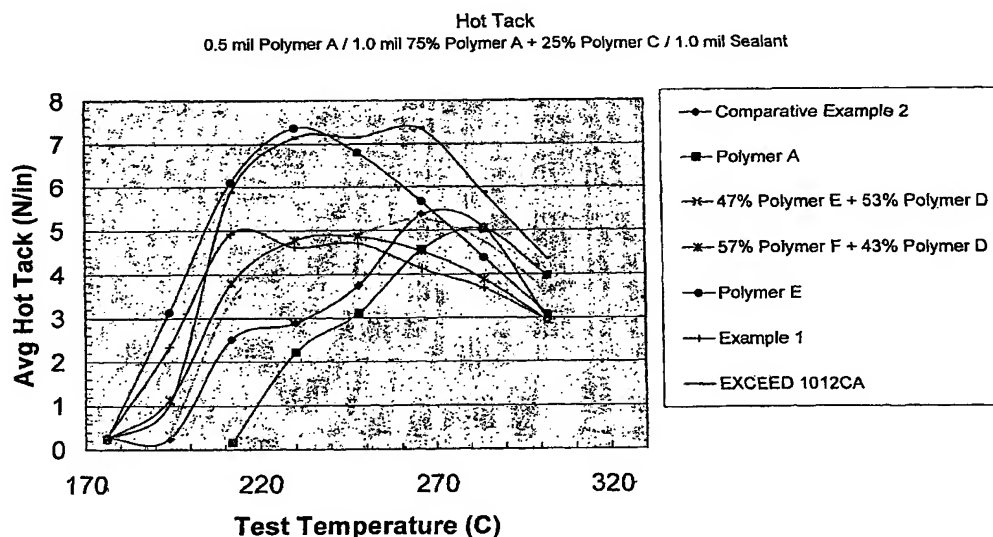
(74) Agent: **HOPPE, James, T.**; The Dow Chemical Company,
Intellectual Property, P.O. Box 1967, Midland, MI 48641-
1967 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: FILM LAYERS MADE FROM ETHYLENE POLYMER BLENDS



(57) Abstract: Film layers made from formulated ethylene polymer compositions are disclosed. Film layers made from such formulated compositions have surprisingly good heat seal properties, and an especially good reduction in heat seal initiation temperature. The ethylene polymer compositions have at least one homogeneously branched ethylene/alpha-olefin interpolymer and at least one homogeneously or heterogeneously branched ethylene polymer which has a lower melt index than the first mentioned component. The first homogeneously branched ethylene/alpha-olefin interpolymer has a melt index higher than that of the formulated composition.



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*